

AMENDMENTS TO THE CLAIMS

The claims are not amended. A complete listing of the claims is set forth below.

1-7 (Cancelled)

8. **(Previously presented)** A method for in vitro screening for a peptide capable of altering the phenotype of a cell, said method comprising the steps:

a) introducing a molecular library of retroviral vectors comprising randomized nucleic acids into a plurality of cells to provide for expression of a plurality of test peptides each comprising a randomized amino acid sequence of up to 10 amino acids in length and a glycine N-terminal to said randomized amino acid sequence,

b) screening said plurality of cells for a cell exhibiting an altered phenotype due to an interaction between a test peptide and a cellular component that is not produced using a nucleic acid made using recombinant DNA technology; and

c) identifying said peptide capable of altering the phenotype of said cell.

9. **(Previously presented)** A method according to claim 8 wherein said identifying comprises:

i) isolating said cell exhibiting an altered phenotype.

10. **(Previously presented)** A method according to claim 9 wherein said identifying further comprises:

ii) sequencing said nucleic acid encoding said peptide capable of altering the phenotype of said cell.

11. **(Previously presented)** A method according to claim 8 wherein said nucleic acids further encode a presentation sequence capable of presenting said test peptides in a conformationally restricted form.

12. **(Previously presented)** A method according to claim 8 wherein said cells are mammalian cells.

13. **(Previously presented)** A method according to claim 8 wherein said library comprises at least 10^4 different nucleic acids.

14. **(Previously presented)** A method according to claim 8 wherein said library comprises at least 10^5 different nucleic acids.

15. **(Previously presented)** A method according to claim 8 wherein said library comprises at least 10^6 different nucleic acids.

16. **(Previously presented)** A method according to claim 8 wherein said library comprises at least 10^7 different nucleic acids.

17. **(Previously presented)** A method according to claim 8 wherein said library comprises at least 10^8 different nucleic acids.

18. **(Previously presented)** A method according to claim 8 wherein said library comprises at least 10^9 different nucleic acids.

19. **(Previously presented)** A method according to claim 8 wherein each of said nucleic acids is linked to nucleic acid encoding at least one fusion partner.

20. **(Previously presented)** A method according to claim 19 wherein said fusion partner comprises a nuclear localization signal sequence.

21. **(Previously presented)** A method for in vitro screening for a peptide capable of altering the phenotype of a cell, said method comprising the steps:

a) introducing a molecular library of retroviral vectors comprising randomized nucleic acids into a plurality of cells to provide for expression of a plurality of test peptides each comprising a randomized amino acid sequence of up to 10 amino acids in length,

b) screening said plurality of cells for a cell exhibiting an altered cell growth phenotype, wherein said altered phenotype is due to an interaction between a test peptide and a cellular component that is not produced using a nucleic acid made using recombinant DNA technology; and

c) identifying said peptide capable of altering the cell growth phenotype of said cell.

22. (Previously presented) A method for in vitro screening for a peptide capable of altering the phenotype of a cell, said method comprising the steps:

a) introducing a molecular library of retroviral vectors comprising randomized candidate nucleic acids into a plurality of cells to provide for expression of a plurality of test peptides each comprising a randomized amino acid sequence of up to 10 amino acids in length;

b) screening said plurality of cells for a cell exhibiting an altered cell death phenotype, wherein said altered phenotype is due to an interaction between a test peptide and a cellular component that is not produced using a nucleic acid made using recombinant DNA technology; and

c) identifying said peptide capable of altering the cell death phenotype of said cell.

23. (Previously presented) A method for in vitro screening for a peptide capable of altering the phenotype of a cell, said method comprising the steps:

a) introducing a molecular library of retroviral vectors comprising randomized candidate nucleic acids into a plurality of cells to provide for expression of a plurality of test peptides each comprising a randomized amino acid sequence of up to 10 amino acids in length;

b) screening said plurality of cells for a cell exhibiting a change in expression of a cellular differentiation marker, wherein said change in expression is due to an interaction between a test peptide and a cellular component that is not produced using a nucleic acid made using recombinant DNA technology; and

c) identifying said peptide capable of changing expression of a cellular differentiation marker of said cell.

24. **(Previously presented)** The method according to claim 23, wherein said cellular differentiation markers are characteristic of T-cell activation.

25. **(Previously presented)** The method according to claim 23, wherein said cellular differentiation markers are characteristic of B-cell activation.